Amendments to the Claims:

Following is a complete listing of the claims pending in the application, as amended:

1. – 6. (Canceled)

7.   (Currently Amended) A ~~The~~ method of ~~claim 3~~ in a first node within a first network for establishing contact with a second node outside the first network, the first node having a physical address, comprising:

detecting an address resolution request broadcast within the first network, the address resolution request containing a logical target address;

determining whether an address resolution response to the detected address resolution request is transmitted from a node in the first network other than the first node;

if it is determined that no address resolution response to the detected address resolution request is transmitted from a node in the first network other than the first node:

transmitting an address resolution response to the detected address resolution request containing the physical address of the first node; and

adopting the logical target address contained by the detected address resolution request as the logical address of the first node,

wherein it is determined that no address resolution response to the detected address resolution request is transmitted from a node in the first network other than the first node if at least a threshold period of time elapses after the address resolution request is detected without a response to the detected address resolution request being detected.

8.   (Currently Amended) A ~~The~~ method of ~~claim 3~~ in a first node within a first network for establishing contact with a second node outside the first network, the first node having a physical address, comprising:

detecting an address resolution request broadcast within the first network, the address resolution request containing a logical target address;

determining whether an address resolution response to the detected address resolution request is transmitted from a node in the first network other than the first node;

if it is determined that no address resolution response to the detected address resolution request is transmitted from a node in the first network other than the first node:

transmitting an address resolution response to the detected address resolution request containing the physical address of the first node; and

adopting the logical target address contained by the detected address resolution request as the logical address of the first node,

wherein it is determined that no address resolution response to the detected address resolution request is transmitted from a node in the first network other than the first node if the detected address resolution request is rebroadcast at least a threshold number of times without a response to the detected address resolution request being detected.

9.   (Currently Amended) A ~~The~~ method of ~~claim 3, further comprising,~~ in a first node within a first network for establishing contact with a second node outside the first network, the first node having a physical address, comprising:

detecting an address resolution request broadcast within the first network, the address resolution request containing a logical target address;

in response to detecting an address resolution request broadcast within the first network, causing to be broadcast in the first network a second address resolution request, the second address resolution request containing as its physical source address the physical address of the first node, the second

address resolution request containing as its logical target address the logical target address contained in the address resolution request;;

determining whether an address resolution response to the detected address resolution request is transmitted from a node in the first network other than the first node;

if it is determined that no address resolution response to the detected address resolution request is transmitted from a node in the first network other than the first node:

transmitting an address resolution response to the detected address resolution request containing the physical address of the first node; and

adopting the logical target address contained by the detected address resolution request as the logical address of the first node,

and wherein it is determined that no address resolution response to the detected address resolution request is transmitted from a node in the first network other than the first node if at least a threshold period of time elapses after the second address resolution request is broadcast without a response to the second address resolution request being detected.

10.   (Currently Amended) A The method of claim 3, further comprising, in a first node within a first network for establishing contact with a second node outside the first network, the first node having a physical address, comprising:

detecting an address resolution request broadcast within the first network, the address resolution request containing a logical target address;

determining whether an address resolution response to the detected address resolution request is transmitted from a node in the first network other than the first node;

if it is determined that no address resolution response to the detected address resolution request is transmitted from a node in the first network other than the first node:

transmitting an address resolution response to the detected address resolution request containing the physical address of the first node;

adopting the logical target address contained by the detected address resolution request as the logical address of the first node, and

~~in response to determining that no address resolution response to the detected address resolution request is transmitted from a node in the first network other than the first node,~~ sending a gratuitous address resolution protocol request identifying the first node as the owner of the logical target address contained in the detected address resolution request.

11.   (Currently Amended) A ~~The~~ method of ~~claim 3, further comprising:~~ in a first node within a first network for establishing contact with a second node outside the first network, the first node having a physical address, comprising:

detecting an address resolution request broadcast within the first network, the address resolution request containing a logical target address;

determining whether an address resolution response to the detected address resolution request is transmitted from a node in the first network other than the first node;

if it is determined that no address resolution response to the detected address resolution request is transmitted from a node in the first network other than the first node:

transmitting an address resolution response to the detected address resolution request containing the physical address of the first node; and

adopting the logical target address contained by the detected address resolution request as the logical address of the first node;

receiving a message containing as its physical target address the physical address of the first node and containing as its logical target address the logical target address contained in the detected address resolution request; and

in response to receiving the message, sending a gratuitous address resolution

protocol request identifying the first node as the owner of the logical target

address contained in the detected address resolution request.

12. – 20.   (Canceled)

21.   (Currently Amended)   A ~~The~~ method ~~of claim 19 wherein~~ in a first node within a first network for establishing contact with a second node outside the first network, comprising:

identifying a first message broadcast within the first network for which no reply is

transmitted, the first message including a source address associated with

the second node, the first message contains a target address~~, and~~

~~wherein the method further comprises,~~;

in response to identifying the first message ~~subsequent to identifying the first~~

~~message~~:

sending a second message to the second node

adopting the target address contained by the first message as the

address of the first node;

including the target address contained by the first message in the

second message as the source address of the second message; and

receiving messages having as their target addresses the target

address contained by the first message.

22. – 32.   (Canceled)

33.   (Currently Amended)   A ~~The~~ method ~~of claim 29, further~~ in a first computing device, comprising:

determining that the first computing device has been connected to a

distinguished computer network, the distinguished computer network

being a first-level computer network that is connected to a second-level

computer network;

utilizing the distinguished computer network and the second-level computer

network to establish contact with a second computing device that is

outside the distinguished computer network by use of a message

addressed to an unused address reserved for use in the distinguished

computer network;

detecting a message sent by the second computing device from an address of

the second computing device to an unused address reserved for use by

the distinguished computer network;

adopting the unused address for use by the first computing device; and

responding to the detected message with a message addressed to the address

of the second computing device from the adopted address.

34. (Currently Amended) A ~~The~~ method ~~of claim 29, further~~ in a first computing device, comprising:

determining that the first computing device has been connected to a

distinguished computer network, the distinguished computer network

being a first-level computer network that is connected to a second-level

computer network;

utilizing the distinguished computer network and the second-level computer

network to establish contact with a second computing device that is

outside the distinguished computer network by use of a message

addressed to an unused address reserved for use in the distinguished

computer network;

monitoring traffic in the distinguished network to identify one or more candidate

addresses for a gateway between the distinguished network and one or

more other networks; and

sending a message to a predetermined address for the second computing device

via each of the identified gateway candidate addresses.

35.   (Original)   The method of claim 34, further comprising sending one or more stimuli messages to elicit traffic in the distinguished network for monitoring.

36. – 73. (Canceled)